

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED/QUALIFIED PRODUCT LIST OF HIGH FRICTION SURFACE TREATMENT
August 14, 2015

This list supersedes the May 8, 2015 list.

Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: June 3, 2014)^a
Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: August 1, 2014)^b

Material Code No. 21639

**The materials on this list can be used on any
contract containing the
Special Provision for High Friction Surface Treatment (BMPR/BSE).**

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

Part A – Epoxy Resin Binder*

*An epoxy resin binder from Part A shall be used with a calcined bauxite aggregate from Part B.

Cornerstone Construction Material, LLC
1618 East Elm Street
Harrisonville, MO 64701
[816-380-1082](tel:816-380-1082)
Attn: Mr. Julian Yan
"CE330 EPOXY BINDER"
DESC1: CC-C330

Dayton Superior
3101 Gardner Avenue
Kansas City, MO 64120
Phone: 800-745-3700 x44187
Attn: Ms. Lisa Weaver
www.daytonsuperior.com
"PRO-POXY TYPE III DOT"
DESC1: DS-PPT3

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 219-448-1416
Attn: Mr. Robert Lansdown
www.sikausa.com
"SIKADUR 22, LO-MOD FS"
DESC1: SC-22LFS

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED/QUALIFIED PRODUCT LIST OF HIGH FRICTION SURFACE TREATMENT
August 14, 2015

This list supersedes the May 8, 2015 list.

Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: June 3, 2014)^a
Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: August 1, 2014)^b

Material Code No. 21639

**The materials on this list can be used on any
contract containing the
Special Provision for High Friction Surface Treatment (BMPR/BSE).**

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

Part B – Calcined Bauxite Aggregate*

* An epoxy resin binder from Part A shall be used with a calcined bauxite aggregate from Part B.

Hickman, Williams & Company
Attn: Mr. John Kingston
Phone: 630-230-1862

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED/QUALIFIED PRODUCT LIST OF HIGH FRICTION SURFACE TREATMENT
August 14, 2015

This list supersedes the May 8, 2015 list.

Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: June 3, 2014)^a
Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: August 1, 2014)^b

Material Code No. 21639

**The materials on this list are qualified only to be used for
Contracts 66D82^a, 66D85^a, 78396^a, 76H20^b, 70B12^b.**

Part A – Epoxy Resin Binder*

* An epoxy resin binder from Part A shall be used with a calcined bauxite aggregate from Part B.

E-Bond Epoxies, Inc.
501 N.E. 33rd Street
P.O. Box 23069
Fort Lauderdale, FL 33307
Phone: 954-566-6555
Attn: Mr. James Ridge
www.ebondepoxies.com
“E-BOND 526”
DESC1: EBE-E526

Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110
Phone: 800-321-7628
Attn: Mr. Brian Lewis
www.euclidchemical.com
“FLEXOLITH”
DESC1: ECC-FLEX

DOW Poly-Carb
1881 West Oak Parkway
Marietta, GA 30062
Phone: 979-238-4183
Attn: Mr. Ruolei Wang
www.poly-carb.com
“MARK-154”
DESC1: DPC-M154
“MARK-163 FLEXOGRID”
DESC1: DPC-M163

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 219-448-1416
Attn: Mr. Robert Lansdown
www.sikausa.com
“SIKADUR 22, LO-MOD”
DESC1: SC-S22LM

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED/QUALIFIED PRODUCT LIST OF HIGH FRICTION SURFACE TREATMENT
August 14, 2015

This list supersedes the May 8, 2015 list.

Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: June 3, 2014)^a
Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: August 1, 2014)^b

Material Code No. 21639

**The materials on this list are qualified only to be used for
Contracts 66D82^a, 66D85^a, 78396^a, 76H20^b, 70B12^b.**

Part B – Calcined Bauxite Aggregate*

* An epoxy resin binder from Part A shall be used with a calcined bauxite aggregate from Part B.

C-E Minerals
(Associated with IMERYS Refractory Minerals)
Attn: Mr. Steven Bovett
Phone: (412) 318-4468

Global Minerals Corporation
Attn: Mr. Dan Ritter
Phone: (724) 409-1031

Great Lakes Minerals
Attn: Mr. Paul Ormond
Phone: (606) 585-4327

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED/QUALIFIED PRODUCT LIST OF HIGH FRICTION SURFACE TREATMENT
August 14, 2015

This list supersedes the May 8, 2015 list.

Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: June 3, 2014)^a
Special Provision for High Friction Surface Treatment (BMPR/BSE) (Effective: August 1, 2014)^b

Material Code No. 21639

**The materials on this list are qualified only to be used for
Contracts 66D82^a, 66D85^a, 78396^a, 76H20^b, 70B12^b.**

List of pre-qualified applicators

ACC West Coast, Inc.
3701 Mallard Drive
Benicia, California 94510
Phone: 707-742-6456
707-746-8028
Attn: Mr. Cliff Barber
P/S Number: 6905-01

DBI
2080 South State Route 19
Oak Harbor, Ohio 43449
Phone: 804-213-0335 (o)
804-539-5582 (c)
Attn: Mr. Richard Baker
P/S Number: 6906-01

Venture Construction
42 Locke Road
Concord, New Hampshire 03301
Phone: 314-420-8803
Attn: Mr. Eric Toman
P/S Number: 6907-01

Illinois Department of Transportation
Bureau of Materials and Physical Research

High Friction Surface Treatment
Part A – Epoxy Resin Binder
Submittal for Review and Approval

Effective: June 6, 2014

Revised: May 8, 2015

A. Scope

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving epoxy resin binder according to the current Special Provision for High Friction Surface Treatment (BMPR/BSE).

B. Procedure

When submitting a epoxy resin binder to the Department, the following shall be included.

- Manufacturer Name;
- The specific product brand name;
- Epoxy resin binder sample – 0.125 gal (0.5 L) sample of each component;
- Independent laboratory test results showing the product meets Department specifications:

Property	Test Method	Requirements
Viscosity, Poises	ASTM D 2556	7 - 30
Ultimate Tensile Strength, psi	AASHTO M 235	2,500 - 5,000
Compressive Strength, psi	ASTM C 579	1,000 min. (3 hours) 5,000 min. (7 days)
Gel Time, minutes	AASHTO M 235	10 min.
Water Absorption, %	AASHTO M 235	1 max.
Durometer Hardness (Shore D)	ASTM D 2240	60 - 80
Cure Rate (Dry through time), hours	ASTM D 1640, 55 mil wet thickness @ 75 °F	3 max.
Elongation at Break Point, %	AASHTO M 235	30 - 70
Mixing Ratio	Provide manufacturer's recommendations a minimum of 60 days prior to construction.	Per Manufacturer
Adhesion Strength, psi @ 24 hrs	ASTM D 4541	250 min. or 100% substrate failure
Infrared Spectrum	AASHTO T 237	Note 1

- Safety Data Sheet;
- Technical Data Sheet;
- A signed letter stating the subject material will not be changed without written notification to the Department;
- Contact person's name, title, address, email address, and phone number; and
- Acknowledgement by Company (see last page of this document).

The sample and submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials & Physical Research
126 East Ash Street
Springfield, IL 62704-4766

The manufacturer/producer/supplier will be notified upon completion of the Department's review. For questions regarding the review and approval process, contact Melinda Winkelman at 217-782-0117.

Illinois Department of Transportation
Bureau of Materials and Physical Research

**High Friction Surface Treatment
Part A – Epoxy Resin Binder
Submittal for Review and Approval**

Effective: June 6, 2014

Revised: May 8, 2015

C. Recertification

Annual recertification of epoxy resin binder is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. The recertification paperwork is due January of the following year. For example, the recertification letter is mailed late November 2015 and due by mid-January 2016. New independent laboratory test results will be due every even number calendar year. For example, new test reports will be due in January 2016.

In addition to the annual recertification, any changes in formulation of the epoxy resin binder outside the manufacturer's original parameters will necessitate new submittal of independent laboratory test results.

Illinois Department of Transportation
Bureau of Materials and Physical Research

High Friction Surface Treatment
Part A – Epoxy Resin Binder
Submittal for Review and Approval

Effective: June 6, 2014

Revised: May 8, 2015

Instructions for Acknowledgement by Company:

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

_____ desires to obtain advance approval of materials to be
(Insert name of company)
supplied to Department of Transportation contractors as more fully described herein. I
and _____ understand that the Department of Transportation
(Insert name of company)
reserves the right in its contracts to approve materials at the source of supply as
provided in Article 106.01 of the Standard Specifications for Road and Bridge
Construction. I and _____ further understand that approval of
(Insert name of company)
company supplied material pursuant to this request does not constitute a contract to
supply material to the State of Illinois or any of its contractors, and that the Department
of Transportation does not assure or guarantee that any materials approved hereunder
will be supplied to the State or any of its contractors. In consideration of approval, I and
_____ agree to the terms, conditions and performance
(Insert name of company)
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company: Individual ☐ Partnership ☐ Corporation ☐

Company Name _____

Printed Name _____

Signature _____

Title _____

Business Address _____

City/State/Zip Code _____

Date of Signature _____

Illinois Department of Transportation
Bureau of Materials and Physical Research

**High Friction Surface Treatment
Part B – Calcined Bauxite Aggregate
Submittal for Review and Approval**

Effective: June 6, 2014

Revised: May 8, 2015

A. Scope

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving calcined bauxite aggregate according to the current Special Provision for High Friction Surface Treatment (BMPPR/BSE).

B. Procedure

When submitting a calcined bauxite aggregate to the Department, the following shall be included.

- Producer/Supplier Name;
- The specific material name;
- Independent laboratory test results showing the product meets Department specifications;

Property	Test Method	Requirements
Gradation		
<u>Sieve Designation</u>		<u>Percent Passing (min.)</u>
No. 4 (4.75 mm)	AASHTO T 27	100
No. 6 (3.35 mm)		95.0-100.0
No. 16 (1.18 mm)		0.0-5.0
Moisture Content, %	AASHTO T 255	0.2 max.
Aluminum Oxide, %	ASTM C 25	87 min.
LA Abrasion Test, %	AASHTO T 96, (D grading)	20 max.

- Calcined bauxite aggregate sample – two 40-lb (18-kg) bags;
- Safety Data Sheet;
- Technical Data Sheet;
- A signed letter stating the source of origin will not be changed without written notification to the Department;
- Contact person's name, title, address, email address, and phone number; and
- Acknowledgement by Company (see last page of this document).

The sample and submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials & Physical Research
126 East Ash Street
Springfield, IL 62704-4766

The manufacturer/producer/supplier will be notified upon completion of the Department's review. For questions regarding the review and approval process, contact Melinda Winkelman at 217-782-0117.

C. Recertification

Annual recertification of calcined bauxite aggregates is required. During the last quarter of the calendar year, a recertification letter will be sent to the producer/supplier. The recertification paperwork is due January of the following year. For example, the recertification letter is mailed late November 2015 and due by mid-January 2016. New independent laboratory test results will be due every even number calendar year. For example, new test reports will be due in January 2016.

In addition to the annual recertification, any changes in the source of origin will necessitate new submittal of independent laboratory test results.

Illinois Department of Transportation
Bureau of Materials and Physical Research

**High Friction Surface Treatment
Part B – Calcined Bauxite Aggregate
Submittal for Review and Approval**

Effective: June 1, 2014

Instructions for Acknowledgement by Company:

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

_____ desires to obtain advance approval of materials to be
(Insert name of company)
supplied to Department of Transportation contractors as more fully described herein. I
and _____ understand that the Department of Transportation
(Insert name of company)
reserves the right in its contracts to approve materials at the source of supply as
provided in Article 106.01 of the Standard Specifications for Road and Bridge
Construction. I and _____ further understand that approval of
(Insert name of company)
company supplied material pursuant to this request does not constitute a contract to
supply material to the State of Illinois or any of its contractors, and that the Department
of Transportation does not assure or guarantee that any materials approved hereunder
will be supplied to the State or any of its contractors. In consideration of approval, I and
_____ agree to the terms, conditions and performance
(Insert name of company)
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company: Individual ☐ Partnership ☐ Corporation ☐

Company Name _____

Printed Name _____

Signature _____

Title _____

Business Address _____

City/State/Zip Code _____

Date of Signature _____